

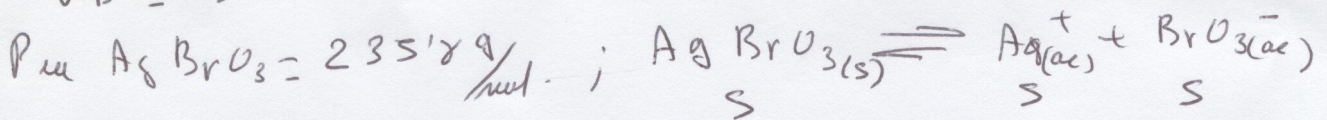
$$P_S = [Ag^+]^2 \cdot [CrO_4^{2-}] = (2S)^2 \cdot S = 4 \cdot S^3$$

$$1'1 \cdot 10^{-11} = 4S^3 ; S = 1'4 \cdot 10^{-4} \text{ mol/L}$$

$P_m Ag_2CrO_4 = 331'7 \text{ g/mol}$

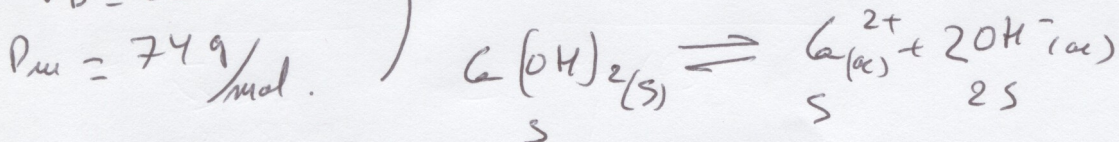
$$\frac{1'4 \cdot 10^{-4} \text{ mol}}{1 \text{ L}} \times \frac{331'7 \text{ g}}{1 \text{ mol}} \times \frac{1 \text{ L}}{1000 \text{ mL}} = 4'6 \cdot 10^{-5} \text{ g/mL}$$

(2) $m_S = 900 \text{ mg} = 0'9 \text{ g}$
 $V_D = 500 \text{ mL} = 0'5 \text{ L}$ } $S = \frac{\frac{0'9 \text{ g}}{235'8 \text{ g/mol}}}{0'5 \text{ L}} = 7'6 \cdot 10^{-3} \text{ mol/L}$



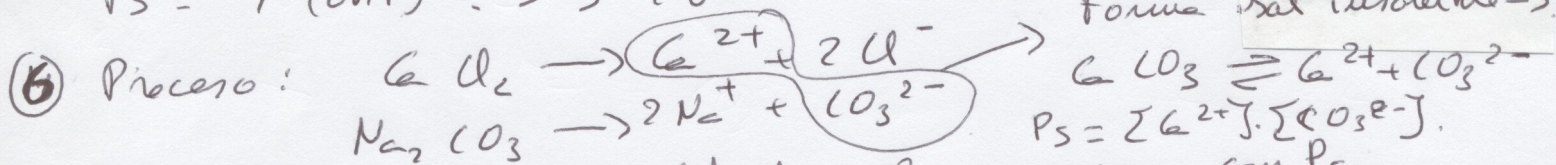
$$P_S = [Ag^+] \cdot [BrO_3^-] = S \cdot S = S^2 ; P_S = (7'6 \cdot 10^{-3})^2 = 5'8 \cdot 10^{-5}$$

(3) $m_S = 0'165 \text{ g}$
 $V_D = 200 \text{ mL}$ } $S = \frac{\frac{0'165 \text{ g}}{74 \text{ g/mol}}}{0'2 \text{ L}} = 0'011 \text{ M}$



$$P_S = [Ca^{2+}] \cdot [OH^-]^2 = S \cdot (2S)^2 = 4S^3$$

$$P_S = 4 \cdot (0'011)^3 = 5'3 \cdot 10^{-6}$$



Formas precipitadas? \rightarrow Calcular Q_S y compararla con P_S .

$$n^\circ CaCl_2 = \frac{S}{111} = 0'045 \text{ mols} ; n^\circ Na_2CO_3 = \frac{S}{106} = 0'047 \text{ mols}$$

$$n^\circ CaCl_2 = n^\circ Ca^{2+} = 0'045 ; [Ca^{2+}] = \frac{0'045}{0'1 \text{ L}} = 0'45 \text{ M}$$

$$n^\circ Na_2CO_3 = n^\circ CO_3^{2-} = 0'047 ; [CO_3^{2-}] = \frac{0'047}{0'1} = 0'47 \text{ M}$$

$$Q_S = [Ca^{2+}] \cdot [CO_3^{2-}] = 0'45 \cdot 0'47 = 0'02$$

$$P_S = 3'4 \cdot 10^{-9} ; Q_S > P_S \Rightarrow \text{Formas precipitadas}$$